ELSEVIER

Biochemical Pharmacology 64 (2002) 1795–1806

Biochemical Pharmacology

Contents of Volume 64

1 July 2002

Commentary

1 Interleukin-1β converting enzyme (caspase-1) in intestinal inflammation
Britta Siegmund

MOLECULAR AND CELLULAR PHARMACOLOGY

9 Similarities and differences in the coupling of human β_1- and β_2-adrenoceptors to Gsα splice variants
Katharina Wenzel-Seifert, Hui-Yu Liu and Roland Seifert

21 Identification of a signaling cascade for interleukin-8 production by *Helicobacter pylori* in human gastric epithelial cells
Yoshihisa Nozawa, Katsushi Nishihara, Richard M. Peek Jr., Motoko Nakano, Tatsuya Uji, Hirofusa Ajioka, Naosuke Matsuura and Hidekazu Miyake

31 Characterization of glomerular cell phenotypes following repeated cycles of benzo[a]pyrene injury *in vitro*
Alan R. Parrish, Napoleon F. Alejandro, Christopher M. Bral, J. Kevin Kerzee, Russell C. Bowes III and Kenneth S. Ramos

41 Alterations in membrane-bound and cytoplasmic K-ras protein levels in mouse lung induced by treatment with lovastatin, cholestyramine, or niacin: effects are highly mouse strain dependent
Richard J. Calvert, Gayatri Ramakrishna, Shirley Tepper, Bhalchandra A. Diwan, Lucy M. Anderson and David Kritchevsky

49 Analysis of rainbow trout Ah receptor protein isoforms in cell culture reveals conservation of function in Ah receptor-mediated signal transduction
Richard S. Pollenz, Brian Necela and Katherine Marks-Sojka

61 Effector coupling of stably transfected human A_3 adenosine receptors in CHO cells
Martin Englert, Ursula Quitterer and Karl-Norbert Klotz

67 NMR and pattern recognition studies on liver extracts and intact livers from rats treated with α-naphthylisothiocyanate
Nigel J. Waters, Elaine Holmes, Catherine J. Waterfield, R. Duncan Farrant and Jeremy K. Nicholson

79 DNA structural alterations induced by bis-netropsins modulate human DNA topoisomerase I cleavage activity and poisoning by camptothecin
Alyona Sukhanova, Sergei Grokhovsky, Michael Ermishov, Konstantin Mochalov, Alexei Zhuze, Vladimir Oleinikov and Igor Nabiev

91 Membrane heme as a host factor in reducing effectiveness of dihydroartemisinin
Phantip Vattanaviboon, Noppadol Siritanaratkul, Jidapa Ketpirune, Prapon Wilairat and Yongyuth Yuthavong

99 Modulation of tamoxifen-induced apoptosis by peripheral benzodiazepine receptor ligands in breast cancer cells
Renate Strohmeier, Marc Roller, Nicole Sänger, Rainald Knecht and Herbert Kuhl

109 Biliverdin IX is an endogenous inhibitor of soluble guanylyl cyclase
Markus Koglin and Sönke Behrends

NEUROSCIENCE

117 Arachidonic acid release and prostaglandin $F_{2\alpha}$ formation induced by phenylarsine oxide in PC12 cells: possible involvement of secretory phospholipase A_2 activity
Keiko Ohsawa, Asako Mori, Syunji Horie, Takeshi Saito, Yasunobu Okuma, Yasuyuki Nomura and Toshihiko Murayama

125 Effects of (−)-nicotine and (−)-cotinine on 6-hydroxydopamine-induced oxidative stress and neurotoxicity: relevance for Parkinson's disease
Ramón Soto-Otero, Estefanía Méndez-Álvarez, Álvaro Hermida-Ameijeiras, Ana María López-Real and José Luis Labandeira-García

PII: S0006-2952(02)01531-9

GENE EXPRESSION AND DEVELOPMENT

137 Gene expression profiling of drug metabolism and toxicology markers using a low-density DNA microarray

Françoise de Longueville, Dominic Surry, Georgina Meneses-Lorente, Vincent Bertholet, Valérie Talbot, Stephanie Evrard, Nathalie Chandelier, Andrew Pike, Phil Worboys, Jean-Paul Rasson, Béatrice Le Bourdellès and José Remacle

GASTROINTESTINAL AND RENAL PHARMACOLOGY

151 Inhibition of transport across the hepatocyte canalicular membrane by the antibiotic fusidate

Konrad A. Bode, Markus G. Donner, Inka Leier and Dietrich Keppler

ERRATUM

159 Erratum to "Drug-resistant human lung cancer cells are more sensitive to selenium cytotoxicity: effects on thioredoxin reductase and glutathione reductase". [Biochem. Pharmacol. 63 (2002) 1875–1884]

Linda Björkhem-Bergman, Kerstin Jönsson, Lennart C. Eriksson, Jerker M. Olsson, Sören Lehmann, Christer Paul and Mikael Björnstedt

15 July 2002

Commentary

161 Lysophosphatidylcholine as a ligand for immunoregulation

Janusz H.S. Kabarowski, Yan Xu and Owen N. Witte

MOLECULAR AND CELLULAR PHARMACOLOGY

169 Inhibition of heparin synthesis by methotrexate in rats *in vivo*

Sisi Marcondes, Elaine C. Baú, Edson Antunes, Carl P. Dietrich, Helena B. Nader and Gilberto De Nucci

177 Induction of cyclooxygenase-2 by staurosporine through the activation of nuclear factor for IL-6 (NF-IL6) and activator protein 2 (AP2) in an osteoblast-like cell line

Chiu-Ya Wang, Huey-Jing Lei, Chi-Ying Fred Huang, Zhongjian Zhang, Anil B. Mukherjee and Chiun-Jye Yuan

185 Renal organic cation and nucleoside transport

Rong Chen, Johan W. Jonker and J. Arly Nelson

191 Mechanism of action of non-cisplatin type DNA-targeted platinum anticancer agents: DNA interactions of novel acridinylthioureas and their platinum conjugates

Hemanta Baruah, Christopher L. Rector, Susanne M. Monnier and Ulrich Bierbach

201 Inhibition of phosphate transport in rat heart mitochondria by 3′-azido-3′-deoxythymidine due to stimulation of superoxide anion mitochondrial production

Daniela Valenti, Anna Atlante, Maria Barile and Salvatore Passarella

207 Enhanced resistance of HeLa cells to cisplatin by overexpression of γ-glutamyltransferase

Sandrine Daubeuf, Pierre Leroy, Aldo Paolicchi, Alfonso Pompella, Maria Wellman, Marie Madeleine Galteau and Athanase Visvikis

217 Effects of polysulfated glycosaminoglycan and triamcinolone acetonid on the production of proteinases and their inhibitors by IL-1α treated articular chondrocytes

Thorsten Sadowski and Jürgen Steinmeyer

229 Inhibition of matrix-proteases by polyphenols: chemical insights for anti-inflammatory and anti-invasion drug design

Luigi Sartor, Elga Pezzato, Isabella Dell'Aica, Rosamaria Caniato, Susan Biggin and Spiridione Garbisa

239 3′-Azido-2′,3′-dideoxythymidine induced deficiency of thymidine kinases 1, 2 and deoxycytidine kinase in H9 T-lymphoid cells

Bettina Gröschel, Andreas Kaufmann, Gerold Höver, Jaroslav Cinatl, Hans Wilhelm Doerr, Paul Noordhuis, Willem J.P. Loves, Godefridus J. Peters and Jindrich Cinatl Jr.

247 Relationship between the activation of heat shock factor and the suppression of nuclear factor-κB activity in rat hepatocyte cultures treated with cyclosporine A

David Andrés, Carmen Díez-Fernández, Antonio Castrillo and María Cascales

257 Identification of two C-terminal amino acids, Ser^{355} and Thr^{357}, required for short-term homologous desensitization of μ-opioid receptors

Hung-Li Wang, Wen-Teng Chang, Chia-Yu Hsu, Pei-Chen Huang, Yu-Wen Chow and Allen H. Li

267 Novel mechanism of Vitamin E protection against cyclosporine A cytotoxicity in cultured rat hepatocytes

David Andrés and María Cascales

277 Modulation of L-arginine transport and nitric oxide production by gabexate mesylate

Giuliana Leoncini, Raffaele Pascale and Maria Grazia Signorello

285 Hyperekplexia mutation of glycine receptors: decreased gating efficacy with altered binding thermodynamics
Gábor Maksay, Tímea Bíró and Bodo Laube

Chemotherapy and Metabolic Inhibitors

289 Covalent binding of the anticancer drug ellipticine to DNA in V79 cells transfected with human cytochrome P450 enzymes
Eva Frei, Christian A. Bieler, Volker M. Arlt, Manfred Wiessler and Marie Stiborová

297 Carbonyl reduction of the potential cytostatic drugs benfluron and 3,9-dimethoxybenfluron in human *in vitro*
Lenka Skálová, Milan Nobilis, Barbora Szotáková, Eliška Kondrová, Michal Šavlík, Vladimír Wsól, Lydiane Pichard-Garcia and Edmund Maser

Gene Expression and Development

307 Activation of the γ-glutamyltransferase promoter 2 in the rat colon carcinoma cell line CC531 by histone deacetylase inhibitors is mediated through the Sp1 binding motif
Idun Merete Mikkelsen, Nils-Erik Huseby, Athanase Visvikis and Ugo Moens

Inflammation and Immunopharmacology

317 Induction of interleukin 8 release from the HMC-1 mast cell line: Synergy between stem cell factor and activators of the adenosine A_{2b} receptor
Christopher J. Meade, Liam Worrall, Dawn Hayes and Ursula Protin

327 GPI 6150, a PARP inhibitor, reduces the colon injury caused by dinitrobenzene sulfonic acid in the rat
Emanuela Mazzon, Laura Dugo, Jia-He Li, Rosanna Di Paola, Tiziana Genovese, Achille P. Caputi, Jie Zhang and Salvatore Cuzzocrea

Gastrointestinal and Renal Pharmacology

339 Indomethacin-induced mitochondrial dysfunction and oxidative stress in villus enterocytes
Jayasree Basivireddy, Anju Vasudevan, Molly Jacob and Kunissery A. Balasubramanian

Errata

351 Erratum to "Tyrphostin AG879, a tyrosine kinase inhibitor: prevention of transcriptional activation of the electrophile and the aromatic hydrocarbon response elements". [Biochem. Pharmacol. 61 (2001) 215–225]
Matthew Z. Dieter, Sarah L. Freshwater, Willy A. Solis, Daniel W. Nebert and Timothy P. Dalton

353 Erratum to "Expression of rat aldehyde reductase AKR7A1: influence of age sex and tissue-specific inducibility". [Biochem. Pharmacol. 62 (2001) 1511–1519]
Anne Grant, Louise Staffas, Louise Mankowitz, Vincent P. Kelly, Margaret M. Manson, Joseph W. DePierre, John D. Hayes and Elizabeth M. Ellis

1 August 2002

Commentary

355 Designer glucocorticoids
Jeffrey N. Miner

Rapid Communication

363 Brain mitochondrial uncoupling protein 2 (UCP2): a protective stress signal in neuronal injury
Ingo Bechmann, Sabrina Diano, Craig H. Warden, Tamas Bartfai, Robert Nitsch and Tamas L. Horvath

369 Uncoupling protein 2 (UCP2) lowers alcohol sensitivity and pain threshold
Balazs Horvath, Claudia Spies, Gyongyi Horvath, Wolfgang J. Kox, Suzanne Miyamoto, Sean Barry, Craig H. Warden, Ingo Bechmann, Sabrina Diano, Jill Heemskerk and Tamas L. Horvath

Molecular and Cellular Pharmacology

375 Agents that elevate cyclic AMP induce receptor phosphorylation primarily at serine 331 in HEK 293 cells overexpressing human thromboxane receptor α
Shuichi Yamamoto, Fengxiang Yan, Huiping Zhou and Hsin-Hsiung Tai

385 Phorbol ester-induced contractility and Ca^{2+} influx in human cultured prostatic stromal cells
John M. Haynes, Lydia Iannazzo and Henryk Majewski

393 Modulations of P450 mRNA in liver and mammary gland and P450 activities and metabolism of estrogen in liver by treatment of rats with indole-3-carbinol
Thomas L. Horn, Mark A. Reichert, Robin L. Bliss and Danuta Malejka-Giganti

405 Inhibition by adenine dinucleotides of ATP-induced prostacyclin release by bovine aortic endothelial cells
Luminita H. Pojoga, Maricela Haghiac and Richard H. Hilderman

413 Cell culture model for acetaminophen-induced hepatocyte death *in vivo*

Robert H. Pierce, Christopher C. Franklin, Jean S. Campbell, Robert P. Tonge, Weichao Chen, Nelson Fausto, Sidney D. Nelson and Sam A. Bruschi

425 Endothelin-1-induced arachidonic acid release by cytosolic phospholipase A_2 activation in rat vascular smooth muscle via extracellular signal-regulated kinases pathway

Lucia Trevisi, Sergio Bova, Gabriella Cargnelli, Giulio Ceolotto and Sisto Luciani

433 Inhibition of platelet P2Y12 and α2A receptor signaling by cGMP-dependent protein kinase

Barsom Aktas, Petra Hönig-Liedl, Ulrich Walter and Jörg Geiger

441 Inhibition of mitochondrial permeability transition and release of cytochrome *c* by anti-apoptotic nucleoside analogues

Luzheng Xue, Vilma Borutaite and Aviva M. Tolkovsky

451 Ribonucleotide reductase and thymidine phosphorylation: two potential targets of azodicarbonamide

Christine Fagny, Michel Vandevelde, Michal Svoboda and Patrick Robberecht

457 Anti-inflammatory drugs modulate C1q secretion in human peritoneal macrophages *in vitro*

Dominik Faust, Bora Akoglu, Dimitrios Zgouras, Ernst-Heinrich Scheuermann, Vladan Milovic and Jürgen Stein

463 Substrate-dependent, non-hyperbolic kinetics of pig brain prolyl oligopeptidase and its tight binding inhibition by JTP-4819

Jarkko I. Venäläinen, Risto O. Juvonen, Markus M. Forsberg, Arturo Garcia-Horsman, Antti Poso, Erik A.A. Wallen, Jukka Gynther and Pekka T. Männistö

Chemotherapy and Metabolic Inhibitors

473 A novel stereo-selective sulfonylurea, 1-[1-(4-aminobenzoyl)-2,3-dihydro-1H-indol-6-sulfonyl]-4-phenylimidazolidin-2-one, has antitumor efficacy in *in vitro* and *in vivo* tumor models

Chang Woo Lee, Dong Ho Hong, Sang Bae Han, Sang-Hun Jung, Hyung Chin Kim, Robert L. Fine, Sang-Han Lee and Hwan Mook Kim

481 Trimidox, an inhibitor of ribonucleotide reductase, synergistically enhances the inhibition of colony formation by Ara-C in HL-60 human promyelocytic leukemia cells

Monika Fritzer-Szekeres, Alexandra Salamon, Michael Grusch, Zsuzsanna Horvath, Thomas Höchtl, Richard Steinbrugger, Walter Jäger, Georg Krupitza, Howard L. Elford and Thomas Szekeres

Neuroscience

487 Lack of correlation between NF-κB activation and induction of programmed cell death in PC12 pheochromocytoma cells treated with 6-hydroxydopamine or the cannabinoid receptor 1-agonist CP55,940

Nina Erlandsson, Bernd Baumann, Oliver G. Rössler, Katrin Kaufmann, Klaus M. Giehl, Thomas Wirth and Gerald Thiel

Hormones and Growth Factors

497 Reduction of bFGF-induced smooth muscle cell proliferation and endothelin receptor mRNA expression by mevastatin and atorvastatin

Cang-Bao Xu, Emelie Stenman and Lars Edvinsson

507 Quantitation of estradiol receptors alpha and beta and progesterone receptors in human breast tumors by real-time reverse transcription-polymerase chain reaction. Correlation with protein assays

Patricia de Cremoux, Carine Tran-Perennou, Caroline Elie, Evelyne Boudou, Catherine Barbaroux, Marie France Poupon, Yann De Rycke, Bernard Asselain and Henri Magdelénat

Inflammation and Immunopharmacology

517 Effect of pirfenidone against vanadate-induced kidney fibrosis in rats

Mohammed Ali Al-Bayati, Yan Xie, F. Charles Mohr, Solomon B. Margolin and Shri N. Giri

Cardiovascular and Pulmonary Pharmacology

527 Analysis of oxidative processes and of myelin figures formation before and after the loss of mitochondrial transmembrane potential during 7β-hydroxycholesterol and 7-ketocholesterol-induced apoptosis: comparison with various pro-apoptotic chemicals

Carole Miguet-Alfonsi, Céline Prunet, Serge Monier, Ginette Bessède, Stéphanie Lemaire-Ewing, Arnaud Berthier, Franck Ménétrier, Dominique Néel, Philippe Gambert and Gérard Lizard

Gastrointestinal and Renal Pharmacology

543 Enhancement of protein kinase C activity and chemiluminescence intensity in mitochondria isolated from the kidney cortex of rats treated with cephaloridine

Yuka Kohda and Munekazu Gemba

ERRATUM

551 Erratum to "Chronic ethanol administration decreases the ligand binding properties and the cellular content of the mannose 6-phosphate/insulin-like growth factor II receptor in rat hepatocytes". [Biochem. Pharmacol. 63 (2002) 1229–1239]
James Haorah, Daniel L. McVicker, James C. Byrd, Richard G. MacDonald and Terrence M. Donohue Jr.

15 August 2002

Commentary

553 Toxic, halogenated cysteine S-conjugates and targeting of mitochondrial enzymes of energy metabolism
Arthur J.L. Cooper, Sam A. Bruschi and M.W. Anders

MOLECULAR AND CELLULAR PHARMACOLOGY

565 Enhancement of glutathione-dependent haemin degradation by ascorbic acid
Cheng-Gang Zou, Nihal S. Agar and Graham Lloyd Jones

573 Modulation of P-glycoprotein expression and function by curcumin in multidrug-resistant human KB cells
Songyot Anuchapreeda, Pranee Leechanachai, Melissa M. Smith, Suresh V. Ambudkar and Porn-ngarm Limtrakul

583 Distinct interactions of $G_{s\alpha\text{-long}}$, $G_{s\alpha\text{-short}}$, and $G_{\alpha olf}$ with GTP, ITP, and XTP
Hui-Yu Liu and Roland Seifert

595 Inhibition of the activity of T lymphocyte Kv1.3 channels by extracellular zinc
Andrzej Teisseyre and Jerzy W. Mozrzymas

609 Cationic liposomes as delivery systems for double-stranded PNA–DNA chimeras exhibiting decoy activity against NF-κB transcription factors
Monica Borgatti, Laura Breda, Rita Cortesi, Claudio Nastruzzi, Alessandra Romanelli, Michele Saviano, Nicoletta Bianchi, Carlo Mischiati, Carlo Pedone and Roberto Gambari

617 mRNA expression profiles for the response of human tumor cell lines to the antimalarial drugs artesunate, arteether, and artemether
Thomas Efferth, Armin Olbrich and Rudolf Bauer

625 Up-regulation of A_{2A} adenosine receptors by proinflammatory cytokines in rat PC12 cells
Maria L. Trincavelli, Barbara Costa, Daniela Tuscano, Antonio Lucacchini and Claudia Martini

633 Role of temperature on protein and mRNA cytochrome P450 3A (CYP3A) isozymes expression and midazolam oxidation by cultured rat precision-cut liver slices
Eleni Rekka, Ekaterina Evdokimova, Stéphane Eeckhoudt, Geoffray Labar and Pedro Buc Calderon

645 G protein-coupled receptor for nicotinic acid in mouse macrophages
Anna Lorenzen, Christina Stannek, Anja Burmeister, Ivars Kalvinsh and Ulrich Schwabe

CHEMOTHERAPY AND METABOLIC INHIBITORS

649 Insufficiently charged isosteric analogue of spermine: interaction with polyamine uptake, and effect on Caco-2 cell growth
Lyudmila Turchanowa, Alexander S. Shvetsov, Alexander V. Demin, Alex R. Khomutov, Heather M. Wallace, Jürgen Stein and Vladan Milovic

657 Effects of *in vivo* treatment of rats with trimethyltin chloride on respiratory properties of rat liver mitochondria
Cecilie Resen-Fellie Skarning, Ludvig Nord Varhaug, Frode Fonnum and Harald Osmundsen

669 Effects of antifolates on the binding of 5-fluoro-2′-deoxyuridine monophosphate to thymidylate synthase
Clasina L. van der Wilt, Kees Smid and Godefridus J. Peters

NEUROSCIENCE

677 Biphasic effects of oxethazaine, a topical anesthetic, on the intracellular Ca^{2+} concentration of PC12 cells
Yasusuke Masuda, Tamami Oguma and Akira Kimura

HORMONES AND GROWTH FACTORS

689 Synergistic effect of dimethyl sulfoxide on glucagon-like peptide 1 (GLP-1)-stimulated insulin secretion and gene transcription in INS-1 cells: characterization and implications
Daniel M. Kemp and Joel F. Habener

GENE EXPRESSION AND DEVELOPMENT

699 Human histamine *N*-methyltransferase pharmacogenetics: gene resequencing, promoter characterization, and functional studies of a common 5′-flanking region single nucleotide polymorphism (SNP)
Liewei Wang, Bianca Thomae, Bruce Eckloff, Eric Wieben and Richard Weinshilboum

711 Expression and activity of the DNA repair enzyme uracil DNA glycosylase during organogenesis in the rat conceptus and following methotrexate exposure *in vitro*
Robert K. Vinson and Barbara F. Hales

STRUCTURAL BIOLOGY

723 Structural and functional characterization of an acidic platelet aggregation inhibitor and hypotensive phospholipase A_2 from *Bothrops jararacussu* snake venom
Silvia H. Andrião-Escarso, Andreimar M. Soares, Marcos R.M. Fontes, André L. Fuly, Fernando M.A. Corrêa, José C. Rosa, Lewis J. Greene and José R. Giglio

733 Differential binding to the α/β-tubulin dimer of vinorelbine and vinflunine revealed by nuclear magnetic resonance analyses
Christine Fabre, Jerzy Czaplicki, Michel Wright, Bridget Hill, Jean Marc Barret, Jacques Fahy and Alain Milon

INFLAMMATION AND IMMUNOPHARMACOLOGY

741 *In vivo* anti-complement effect of bilirubin-IXα
Sandra M. Arriaga, Adriana M. Almará and Aldo D. Mottino

745 Sodium tanshinone IIA sulfonate derived from Danshen (*Salvia miltiorrhiza*) attenuates hypertrophy induced by angiotensin II in cultured neonatal rat cardiac cells
Kyoko Takahashi, Xinshou Ouyang, Katsuko Komatsu, Norio Nakamura, Masao Hattori, Akemichi Baba and Junichi Azuma

Erratum

751 Erratum to "Mechanism of action of non-cisplatin type DNA-targeted platinum anticancer agents: DNA interactions of novel acridinylthioureas and their platinum conjugates". [Biochem. Pharmacol. 64 (2002) 191–200]
Hemanta Baruah, Christopher L. Rector, Susanne M. Monnier and Ulrich Bierbach

September 2002

753 Cell signaling, transcription and translation as therapeutic targets
Marc Diederich

SIGNALING PATHWAYS

755 Fidelity and spatio-temporal control in MAP kinase (ERKs) signalling
Jacques Pouysségur, Véronique Volmat and Philippe Lenormand

765 Antioxidants and oxidants regulated signal transduction pathways
Edward D. Owuor and Ah-Ng Tony Kong

771 Activation of mitogen-activated protein kinases (MAPKs) by aromatic hydrocarbons: role in the regulation of aryl hydrocarbon receptor (AHR) function
Zongqing Tan, Xiaoqing Chang, Alvaro Puga and Ying Xia

781 The c-Jun N-terminal kinases in cerebral microglia: immunological functions in the brain
Ute Hidding, Kirsten Mielke, Vicki Waetzig, Stephan Brecht, Uwe Hanisch, Alexander Behrens, Erwin Wagner and Thomas Herdegen

789 Inflammatory signal transduction in Crohn's disease and novel therapeutic approaches
Catherine van Montfrans, Maikel Peppelenbosch, Anje A. te Velde and Sander van Deventer

797 Growth signaling in breast cancer cells: outcomes and promises of proteomics
Eric Adriaenssens, Jérôme Lemoine, Ikram El Yazidi-Belkoura and Hubert Hondermarck

RECEPTOR SIGNALING

805 Divalent cations and the relationship between αA and βA domains in integrins
Kah-Tong Seow, Jian-Ping Xiong, M. Amin Arnaout, Jutta Welge, Friedrich Rippmann and Simon L. Goodman

813 A homogenous assay to monitor the activity of the insulin receptor using Bioluminescence Resonance Energy Transfer
Tarik Issad, Nicolas Boute and Karine Pernet

CELL CYCLE CONTROL

819 Identifying *in vivo* targets of cyclin-dependent kinase inhibitors by affinity chromatography
Marie Knockaert and Laurent Meijer

827 ErbB-2-induced mammary tumor growth: the role of cyclin D1 and p27Kip1
James Hulit, Richard. J. Lee, Robert G. Russell and Richard G. Pestell

837 Independent contribution of three different pathways to ultraviolet-B-induced apoptosis
Dagmar Kulms and Thomas Schwarz

843 Cell-specific regulation of apoptosis by glucocorticoids: implication to their anti-inflammatory action

Abraham Amsterdam, Kimihisa Tajima and Ravid Sasson

851 Prospects for targeting the Bcl-2 family of proteins to develop novel cytotoxic drugs
Jonathan B. Baell and David C.S. Huang

865 Regulation of p53: intricate loops and delicate balances
Moshe Oren, Alexander Damalas, Tanya Gottlieb, Dan Michael, Jan Taplick, Juan Fernando Martinez Leal, Ruth Maya, Miri Moas, Rony Seger, Yoichi Taya and Avri Ben-Ze'ev

873 Identification of cytokine-induced nuclear factor-kappaB target genes in ovarian and breast cancer cells
Valérie Deregowski, Sylvie Delhalle, Valérie Benoit, Vincent Bours and Marie-Paule Merville

883 Nuclear factor-kappa B and cancer: its role in prevention and therapy
Alok C. Bharti and Bharat B. Aggarwal

889 Is HIF-1α a pro- or an anti-apoptotic protein?
Jean-Pascal Piret, Denis Mottet, Martine Raes and Carine Michiels

NUTRIENTS REGULATED GENE EXPRESSION

893 Is there a single mechanism for fatty acid regulation of gene transcription?
Eric Duplus and Claude Forest

903 Signaling cross-talk between hypoxia and glucose via hypoxia-inducible factor 1 and glucose response elements
Thomas Kietzmann, Anja Krones-Herzig and Kurt Jungermann

913 Genomic responses to herbal extracts: lessons from *in vitro* and *in vivo* studies with an extract of *Ginkgo biloba*
Kishorchandra Gohil

TRANSCRIPTIONAL REGULATION

919 Designed transcription factors as tools for therapeutics and functional genomics
Fyodor D. Urnov and Edward J. Rebar

925 Diversity of acetylation targets and roles in transcriptional regulation: the human immunodeficiency virus type 1 promoter as a model system
Vincent Quivy and Carine Van Lint

935 Oxidative stress, transcription factors and chromatin remodelling in lung inflammation
Irfan Rahman

943 Transcriptional regulators of the human multidrug resistance 1 gene: recent views
Stéphane Labialle, Landry Gayet, Eric Marthinet, Dominique Rigal and Loris G. Baggetto

949 Function of AP-1 target genes in mesenchymal–epithelial cross-talk in skin
Peter Angel and Axel Szabowski

957 Evasion from proteasomal degradation by mutated Fos proteins expressed from FBJ-MSV and FBR-MSV osteosarcomatogenic retroviruses
Claire Acquaviva, Guillaume Bossis, Patrizia Ferrara, Frédérique Brockly, Isabelle Jariel-Encontre and Marc Piechaczyk

963 Regulation of the transcriptional activity of the nuclear factor-κB p65 subunit
Linda Vermeulen, Gert De Wilde, Sofie Notebaert, Wim Vanden Berghe and Guy Haegeman

971 Reduction of tumor necrosis factor-alpha (TNF-α) related nuclear factor-kappaB (NF-κB) translocation but not inhibitor kappa-B (Iκ-B)-degradation by Rho protein inhibition in human endothelial cells
Stefan Hippenstiel, Bernd Schmeck, Joachim Seybold, Matthias Krüll, Christoph v. Eichel-Streiber and Norbert Suttorp

979 Differential activity by DNA-induced quarternary structures of POU transcription factors
Attila Reményi, Alexey Tomilin, Hans R. Schöler and Matthias Wilmanns

985 Multiple signaling pathways leading to the activation of interferon regulatory factor 3
Marc J. Servant, Nathalie Grandvaux and John Hiscott

993 Signal transduction to hypoxia-inducible factor 1
Gregg L. Semenza

SIGNAL TRANSDUCTION, STRESS RESPONSE AND AGING

999 Age-related decline in cellular response to oxidative stress: links to growth factor signaling pathways with common defects
Nikki J. Holbrook and Shizuo Ikeyama

1007 Stress-induced premature senescence and tissue ageing
Olivier Toussaint, Véronique Royer, Michel Salmon and José Remacle

1011 Stress-induced premature senescence and replicative senescence are different phenotypes, proteomic evidence
Jean-François Dierick, François Eliaers, José Remacle, Martine Raes, Stephen J. Fey, Peter Mose Larsen and Olivier Toussaint

THIOLS, PROTEIN THIOLATION AND CELL SIGNALING

1019 Cellular glutathione and thiols metabolism
Dale A. Dickinson and Henry Jay Forman

1027 Glutathione catabolism as a signaling mechanism
Aldo Paolicchi, Silvia Dominici, Lisa Pieri, Emilia Maellaro and Alfonso Pompella

1037 Glutathione, iron and Parkinson's disease
Srinivas Bharath, Michael Hsu, Deepinder Kaur, Subramanian Rajagopalan and Julie K. Andersen

1049 Glutathionylation of proteins by glutathione disulfide S-oxide
Kuo-Ping Huang and Freesia L. Huang

1057 Cell signalling and the glutathione redox system
Giuseppe Filomeni, Giuseppe Rotilio and Maria Rosa Ciriolo

1065 Thioredoxins and related proteins in photosynthetic organisms: molecular basis for thiol dependent regulation
Jean-Pierre Jacquot, Eric Gelhaye, Nicolas Rouhier, Catherine Corbier, Claude Didierjean and André Aubry

1 October 2002

Commentary

1071 A novel pathway regulating the mammalian target of rapamycin (mTOR) signaling
Jie Chen and Yimin Fang

MOLECULAR AND CELLULAR PHARMACOLOGY

1079 Effects of FK228, a novel histone deacetylase inhibitor, on human lymphoma U-937 cells *in vitro* and *in vivo*
Yuka Sasakawa, Yoshinori Naoe, Takeshi Inoue, Tatsuya Sasakawa, Masahiko Matsuo, Toshitaka Manda and Seitaro Mutoh

1091 SU9516, a cyclin-dependent kinase 2 inhibitor, promotes accumulation of high molecular weight E2F complexes in human colon carcinoma cells
Bo Yu, Maureen E. Lane and Scott Wadler

1101 Complementary DNA cloning and characterization of cytochrome P450 2D29 from Japanese monkey liver
Hiroyuki Hichiya, Chie Takemi, Daisuke Tsuzuki, Shigeo Yamamoto, Kazuo Asaoka, Satoshi Suzuki, Tetsuo Satoh, Sumio Shinoda, Hiroyuki Kataoka and Shizuo Narimatsu

1111 Chemosensitization by fibroblast growth factor-2 is not dependent upon proliferation, S-phase accumulation, or p53 status
Aaron B. Coleman, Marianne Z. Metz, Cécile A. Donohue, Roderich E. Schwarz and Susan E. Kane

1125 Use of *Chlamydomonas reinhardtii* mutants for anticancer drug screening
Karine Maucourt, Manjul Agarwal, Brigitte René and Serge Fermandjian

1133 Effects of nitrosopropofol on mitochondrial energy-converting system
Roberto Stevanato, Federico Momo, Michela Marian, Maria Pia Rigobello, Alberto Bindoli, Marcantonio Bragadin, Ezio Vincenti and Guido Scutari

1139 Effect of free iron on collagen synthesis, cell proliferation and MMP-2 expression in rat hepatic stellate cells
Concetta Gardi, Beatrice Arezzini, Vittoria Fortino and Mario Comporti

CHEMOTHERAPY AND METABOLIC INHIBITORS

1147 Regulation of anandamide tissue levels by *N*-arachidonylglycine
Sumner H. Burstein, Susan M. Huang, Timothy J. Petros, Ronald G. Rossetti, J Michael Walker and Robert B. Zurier

1151 Inhibition of cytochrome P450 2E1 by propofol in human and porcine liver microsomes
Corinne Lejus, Alain Fautrel, Yannick Mallédant and André Guillouzo

HORMONES AND GROWTH FACTORS

1157 Contribution of different phospholipases and arachidonic acid metabolites in the response of gallbladder smooth muscle to cholecystokinin
Soledad Alcón, Sara Morales, Pedro J. Camello and María J. Pozo

INFLAMMATION AND IMMUNOPHARMACOLOGY

1169 Cyclic AMP differentially modulates CD40L expression on human naïve and memory $CD4^+$ T cells
Denise Wingett and Christopher P. Nielson

1179 Biochemical and biological properties of phospholipases A_2 from *Bothrops atrox* snake venom
Milton M. Kanashiro, Rita de Cássia M. Escocard, Jorge H. Petretski, Maura V. Prates, Elias W. Alves, Olga L.T. Machado, Wilmar Dias da Silva and Thereza L. Kipnis

1187 Role of mast cell chymase in allergen-induced biphasic skin reaction

Yoshiaki Tomimori, Nobuo Tsuruoka, Harukazu Fukami, Kayo Saito, Chika Horikawa, Masayuki Saito, Tsuyoshi Muto, Namino Sugiura, Kyoko Yamashiro, Motoo Sumida, Saki Kakutani and Yoshiaki Fukuda

15 October 2002

Commentary

1195 Glutamate antagonists limit tumor growth

Wojciech Rzeski, Chrysanthy Ikonomidou and Lechoslaw Turski

MOLECULAR AND CELLULAR PHARMACOLOGY

1201 Characterization of the cAMP binding site of purified *S*-adenosyl-homocysteine hydrolase from bovine kidney

Doris Kloor, Lusine Danielyan and Hartmut Osswald

1207 Antagonist interaction with endogenous AT_1 receptors in human cell lines

Ilse Verheijen, Patrick M.L. Vanderheyden, Jean-Paul De Backer, Serge Bottari and Georges Vauquelin

1215 Contribution of apoptosis in the cytotoxicity of the oxaliplatin–irinotecan combination in the HT29 human colon adenocarcinoma cell line

Stéphanie Arnould, Sylvie Guichard, Isabelle Hennebelle, Georges Cassar, Roland Bugat and Pierre Canal

1227 Diverse functional coupling of cyclooxygenase 1 and 2 with final prostanoid synthases in liver macrophages

Sabine Schade, Yevgeniya Bezugla, Angelika Kolada, Sabine Kamionka, Roland Scheibe and Peter Dieter

1233 Potentiation of 1,25-dihydroxyvitamin D_3-induced differentiation of human promyelocytic leukemia cells into monocytes by costunolide, a germacranolide sesquiterpene lactone

Seung H. Kim, So N. Kang, Hyeoung J. Kim and Tae S. Kim

1243 Comparative analysis of human and rat $S1P_5$ (edg8): differential expression profiles and sensitivities to antagonists

Anke Niedernberg, Constanze R. Scherer, Andreas E. Busch and Evi Kostenis

1251 Modulation of agonist responses at the A_1 adenosine receptor by an irreversible antagonist, receptor–G protein uncoupling and by the G protein activation state

Anna Lorenzen, Margot W. Beukers, Piet Hein van der Graaf, Heidrun Lang, Jacqueline van Muijlwijk-Koezen, Miriam de Groote, Wiro Menge, Ulrich Schwabe and Adriaan P. IJzerman

CHEMOTHERAPY AND METABOLIC INHIBITORS

1267 The activity profile of the hexacyclic camptothecin derivative DX-8951f in experimental human colon cancer and ovarian cancer

Annemarie H. van Hattum, Herbert M. Pinedo, Hennie M.M. Schlüper, Caroline A.M. Erkelens, Akiko Tohgo and Epie Boven

1279 Novel competitive irreversible inhibitors of aldehyde dehydrogenase (ALDH1): restoration of chemosensitivity of L1210 cells overexpressing ALDH1 and induction of apoptosis in BAF_3 cells overexpressing bcl_2

Gerard Quash, Guy Fournet, Jacqueline Chantepie, Jacques Gore, Claude Ardiet, Dominique Ardail, Yvonne Michal and Uwe Reichert

NEUROSCIENCE

1293 Degradation of nociceptin (orphanin FQ) by mouse spinal cord synaptic membranes is triggered by endopeptidase-24.11: an *in vitro* and *in vivo* study

Chikai Sakurada, Shinobu Sakurada, Tohru Orito, Koichi Tan-No and Tsukasa Sakurada

1 November 2002

Commentary

1305 Role of the Fas/Fas ligand system in female reproductive organs: survival and apoptosis

Gil Mor, Shawn Straszewski and Marijke Kamsteeg

RAPID COMMUNICATION

1317 Expression and purification of a recombinant form of human aromatase from *Escherichia coli*

Fangming Zhang, Dujin Zhou, Yeh-Chih Kao, Jingjing Ye and Shiuan Chen

MOLECULAR AND CELLULAR PHARMACOLOGY

1325 Pro-apoptotic actions of exisulind and CP461 in SW480 colon tumor cells involve β-catenin and cyclin D1 down-regulation

Han Li, Li Liu, Mary L. David, Clark M. Whitehead, Ming Chen, John R. Fetter, Gerhard J. Sperl, Rifat Pamukcu and W. Joseph Thompson

1337 Evidence for the presence of glutamatergic receptors in adult *Schistosoma mansoni*

Dayde Lane Mendonça-Silva, Renata Fittipaldi Pessôa and François Noël

1345 Inhibition of prostaglandin E_2 production by taiwanin C isolated from the root of *Acanthopanax chiisanensis* and the mechanism of action

Hyun Seung Ban, Sanghyun Lee, Yong Pil Kim, Kouya Yamaki, Kuk Hyun Shin and Kazuo Ohuchi

1355 Predicting plasma protein binding of drugs: a new approach

Nicole A. Kratochwil, Walter Huber, Francis Müller, Manfred Kansy and Paul R. Gerber

1375 The antiproliferative activity of resveratrol results in apoptosis in MCF-7 but not in MDA-MB-231 human breast cancer cells: cell-specific alteration of the cell cycle

Eulalia Pozo-Guisado, Alberto Alvarez-Barrientos, Sonia Mulero-Navarro, Belen Santiago-Josefat and Pedro M. Fernandez-Salguero

1387 The molecular and enzyme kinetic basis for the diminished activity of the cytochrome P450 2D6.17 (CYP2D6.17) variant. Potential implications for CYP2D6 phenotyping studies and the clinical use of CYP2D6 substrate drugs in some African populations

Tashinga E. Bapiro, Julia A. Hasler, Marianne Ridderström and Collen M. Masimirembwa

CHEMOTHERAPY AND METABOLIC INHIBITORS

1399 Haem polymerase as a novel target of antimalarial action of cyproheptadine

Rashmi Agrawal, Renu Tripathi, Babu L. Tekwani, S.K. Jain, Guru P. Dutta and Onkar P. Shukla

1407 Enhanced activity of liposomal polymyxin B against *Pseudomonas aeruginosa* in a rat model of lung infection

Abdelwahab Omri, Zacharias E. Suntres and Pang N. Shek

NEUROSCIENCE

1415 Anxiolytic effect of wogonin, a benzodiazepine receptor ligand isolated from *Scutellaria baicalensis* Georgi

Kwok Min Hui, Michael S.Y. Huen, Hong Yan Wang, Hui Zheng, Erwin Sigel, Roland Baur, Hong Ren, Zhi Wang Li, J. Tze-Fei Wong and Hong Xue

15 November 2002

Commentary

1425 Endoplasmic reticulum (ER) stress: hepatitis C virus induces an ER-nucleus signal transduction pathway and activates NF-κB and STAT-3

Gulam Waris, Keith D. Tardif and Aleem Siddiqui

MOLECULAR AND CELLULAR PHARMACOLOGY

1431 Role of noradrenaline on the expression of the Na^+/K^+-ATPase α_2 isoform and the contractility of cultured rat vas deferens

Luis Eduardo M. Quintas, Simone S.L. Lafayette, Afonso Caricati-Neto, Aron Jurkiewicz and François Noël

1439 5-Fluorouracil inhibits nitric oxide production through the inactivation of IκB kinase in stomach cancer cells

In Duk Jung, So Young Yang, Chang Gyo Park, Kyung Bok Lee, Jong Seung Kim, Seok Yong Lee, Jeung Whan Han, Hyang Woo Lee and Hoi Young Lee

1447 Molecular cloning and characterization of mouse CYP2J6, an unstable cytochrome P450 isoform

Jixiang Ma, J. Alyce Bradbury, Lorraine King, Robert Maronpot, Linda S. Davis, Matthew D. Breyer and Darryl C. Zeldin

1461 Enhanced activity of human *N*-myristoyltransferase by dimethyl sulfoxide and related solvents in the presence of serine/threonine-containing peptide substrates

Mohammed Khysar Pasha, Jonathan R. Dimmock, Morley D. Hollenberg and Rajendra K. Sharma

1469 UVB light suppresses nitric oxide production by murine keratinocytes and macrophages

Runa Sur, Diane E. Heck, Thomas M. Mariano, Yang Jin, William J. Murphy and Jeffrey D. Laskin

1483 Differential effect of simvastatin on activation of Rac_1 vs. activation of the heat shock protein 27-mediated pathway upon oxidative stress, in human smooth muscle cells

Pascale Nègre-Aminou, Rick E.W. van Leeuwen, G. Christa F. van Thiel, Paul van den IJssel, Wilfried W. de Jong, Roy A. Quinlan and Louis H. Cohen

CHEMOTHERAPY AND METABOLIC INHIBITORS

1493 Analytical and pharmacokinetic studies with 5-chloro-2′-deoxycytidine

JodiAnne T. Hale, James C. Bigelow, Linda A. Mathews and John J. McCormack

1503 Cytotoxicity of dopamine-derived tetrahydroisoquinolines on melanoma cells

Federico De Marco, Marzia Perluigi, Maria Luisa Marcante, Raffaella Coccia, Cesira Foppoli, Carla Blarzino and Maria Anna Rosei

Gene Expression and Development

1513 PXR-dependent induction of human *CYP3A4* gene expression by organochlorine pesticides

Xavier Coumoul, Monique Diry and Robert Barouki

Cardiovascular and Pulmonary Pharmacology

1521 Antioxidants inhibit endothelin-1 (1–31)-induced proliferation of vascular smooth muscle cells via the inhibition of mitogen-activated protein (MAP) kinase and activator protein-1 (AP-1)

Moe Kyaw, Masanori Yoshizumi, Koichiro Tsuchiya, Kazuyoshi Kirima, Yuki Suzaki, Shinji Abe, Toyoshi Hasegawa and Toshiaki Tamaki

Gastrointestinal and Renal Pharmacology

1533 Cellular energetics and glutathione status in NRK-52E cells: toxicological implications

Lawrence H. Lash, David A. Putt, Sarah E. Hueni, Wei Cao, Feng Xu, Stephen J. Kulidjian and Judith P. Horwitz

1547 Corrigendum to "Antioxidants and oxidants regulated signal transduction pathways". [Biochem. Pharmacol. 64 (2002) 765–770]

Edward D. Owuor and Ah-Ng Tony Kong

1 December 2002

Commentary

1549 Cysteinyl leukotriene receptors

Yiqun Hui and Colin D. Funk

Molecular and Cellular Pharmacology

1559 Identification of residues involved in the substrate specificity of human and murine dCK

Elena V. Usova and Staffan Eriksson

1569 Endogenous drug transporters in *in vitro* and *in vivo* models for the prediction of drug disposition in man

Lay-Beng Goh, Kevin J. Spears, Denggao Yao, Andy Ayrton, Paul Morgan, C. Roland Wolf and Thomas Friedberg

1579 CYP2C8 polymorphisms in Caucasians and their relationship with paclitaxel 6α-hydroxylase activity in human liver microsomes

Namrata Bahadur, Julian B.S. Leathart, Elaine Mutch, Dorothy Steimel-Crespi, Stuart A. Dunn, Ron Gilissen, Jos Van Houdt, Jan Hendrickx, Geert Mannens, Hilde Bohets, Faith M. Williams, Martin Armstrong, Charles L. Crespi and Ann K. Daly

1591 Quercetin, apoptosis, heat shock

Joanna Jakubowicz-Gil, Jolanta Rzymowska and Antoni Gawron

1597 A physiological threshold for protection against menadione toxicity by human NAD(P)H:quinone oxidoreductase (NQO1) in Chinese hamster ovary (CHO) cells

Laura H.J. De Haan, Anne-Marie J.F. Boerboom, Ivonne M.C.M. Rietjens, Daniëlla van Capelle, Annemieke J.M. De Ruijter, Anil K. Jaiswal and Jac M.M.J.G. Aarts

1605 Carbazolequinone induction of caspase-dependent cell death in Src-overexpressing cells

Abdel Aouacheria, Benjamin Néel, Zouhair Bouaziz, Rigal Dominique, Nadia Walchshofer, Joëlle Paris, Houda Fillion and Germain Gillet

Chemotherapy and Metabolic Inhibitors

1617 Cytotoxic and genotoxic effects of megazol, an anti-Chagas' disease drug, assessed by different short-term tests

Paola Poli, Michele Aline de Mello, Annamaria Buschini, Renato Arruda Mortara, Cristina Northfleet de Albuquerque, Solange da Silva, Carlo Rossi and Tânia Maria Araújo Domingues Zucchi

Hormones and Growth Factors

1629 Synergistic effects of troglitazone and oleate on the translatability of preproinsulin mRNA from INS-1 cells

L. Cornelius Bollheimer, Simone M. Kagerbauer, Roland Buettner, Daniela M. Kemptner, Klaus-Dieter Palitzsch, Jürgen Schölmerich and Sigrun R. Hügl

Gene Expression and Development

1637 Influence of isolation procedure, extracellular matrix and dexamethasone on the regulation of membrane transporters gene expression in rat hepatocytes

Olivier Luttringer, Frank-Peter Theil, Thierry Lavé, Karin Wernli-Kuratli, Theodor W. Guentert and Antoine de Saizieu

Structural Biology

1651 Retinoic acid binding properties of the lipocalin member β-lactoglobulin studied by circular dichroism, electronic absorption spectroscopy and molecular modeling methods
Ferenc Zsila, Zsolt Bikádi and Miklós Simonyi

Gastrointestinal and Renal Pharmacology

1661 Antioxidant properties of ursodeoxycholic acid
Domenico Lapenna, Giuliano Ciofani, Davide Festi, Matteo Neri, Sante D. Pierdomenico, Maria Adele Giamberardino and Franco Cuccurullo

15 December 2002

Commentary

1669 Cholesteryl ester transfer protein facilitates the movement of water-insoluble drugs between lipoproteins: a novel biological function for a well-characterized lipid transfer protein
Mona Kwong and Kishor M. Wasan

Molecular and Cellular Pharmacology

1677 Down-regulation of telomerase activity via protein phosphatase 2A activation in salvicine-induced human leukemia HL-60 cell apoptosis
Wei-Jun Liu, Jian-Fei Jiang, Dong Xiao and Jian Ding

1689 Mobilization of intracellular iron by analogs of pyridoxal isonicotinoyl hydrazone (PIH) is determined by the membrane permeability of the iron–chelator complexes
Joan L. Buss, Emmanuele Arduini and Prem Ponka

1703 Down-regulation of phenobarbital-induced cytochrome P4502B mRNAs and proteins by endotoxin in mice: independence from nitric oxide production by inducible nitric oxide synthase
Tong Li-Masters and Edward T. Morgan

1713 Emodin induces apoptosis in human promyeloleukemic HL-60 cells accompanied by activation of caspase 3 cascade but independent of reactive oxygen species production
Yen-Chou Chen, Shing-Chuan Shen, Woan-Ruoh Lee, Foun-Lin Hsu, Hui-Yi Lin, Ching-Huai Ko and Shi-Wen Tseng

1725 Role of antioxidants in the O-hydroxyethyl-D-(Ser)^8-cyclosporine A (SDZ IMM125)-induced apoptosis in rat hepatocytes
Sibylle Grub, Wolfgang E. Trommer and Armin Wolf

Chemotherapy and Metabolic Inhibitors

1737 Paramagnetic species in the plasma of dogs with lymphoma prior to and after treatment with doxorubicin. An ESR study
Lars Gille, Miriam Kleiter, Michael Willmann and Hans Nohl

1745 Hypoxia increases tumor cell sensitivity to glycolytic inhibitors: a strategy for solid tumor therapy (Model C)
Huaping Liu, Niramol Savaraj, Waldemar Priebe and Theodore J. Lampidis

Hormones and Growth Factors

1753 A kinetic study of glucagon-like peptide-1 and glucagon-like peptide-2 truncation by dipeptidyl peptidase IV, *in vitro*
Anne-Marie Lambeir, Paul Proost, Simon Scharpé and Ingrid De Meester

Gene Expression and Development

1757 Inhibition of zinc finger protein–DNA interactions by sodium selenite
Jason L. Larabee, James R. Hocker, R. Jane Hanas, Farhan M. Kahn and Jay S. Hanas

Inflammation and Immunopharmacology

1767 Hyperforin is a dual inhibitor of cyclooxygenase-1 and 5-lipoxygenase
Dana Albert, Ilse Zündorf, Theo Dingermann, Walter E. Müller, Dieter Steinhilber and Oliver Werz

Cardiovascular and Pulmonary Pharmacology

1777 Novel effect of carvedilol on Ca^{2+} movement in renal tubular cells
Chun-Peng Liu, Hung-Ting Chiang and Chung-Ren Jan

1785 Role of poly(ADP-ribose) polymerase activation in endotoxin-induced cardiac collapse in rodents
Pál Pacher, Attila Cziráki, Jon G. Mabley, Lucas Liaudet, Lajos Papp and Csaba Szabó

1795 Contents of Volume 64

1807 Author Index

1813 Subject Index